

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2001108894
PUBLICATION DATE : 20-04-01

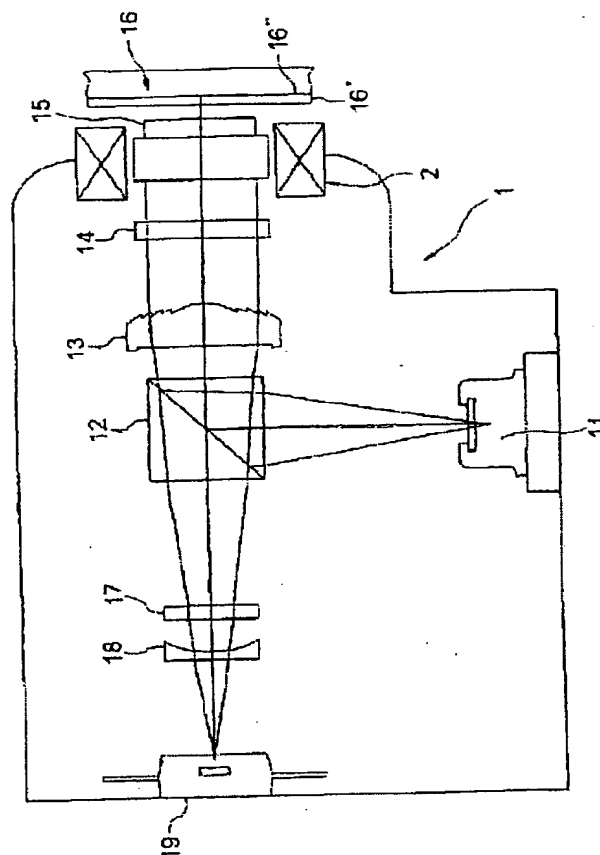
APPLICATION DATE : 08-10-99
APPLICATION NUMBER : 11287765

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INT.CL. : G02B 13/00 G02B 13/18 G11B 7/125
G11B 7/135

TITLE : OPTICAL SYSTEM FOR OPTICAL
PICKUP, OPTICAL PICKUP DEVICE,
COUPLING OPTICAL SYSTEM, LENS
FOR COUPLING OPTICAL SYSTEM,
AND RECORDING AND
REPRODUCING DEVICE



ABSTRACT : PROBLEM TO BE SOLVED: To provide an optical system for optical pickup which can correct an on-axis chromatic aberration with a relatively simple constitution and can be manufactured at a low cost even when a light source with inferior monochromaticity or a light source which abruptly varies in wavelength is used.

SOLUTION: The optical system for optical pickup is provided with a coupling optical system and an objective lens optical system and a diffracting surface is formed on a diffraction integrated type collimator 13 as the coupling optical system. The diffracting surface of the diffraction integrated type collimator 13 generates an on-axis chromatic aberration which is equal in size to and opposite in sign from that of an objective lens 15, so the luminous flux emitted by a semiconductor laser 11 is converged on an information recording surface 16' of an optical disk 16 nearly without on-axis chromatic aberration.

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